BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of		
Application by BellSouth Corporation for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Services in the States of Georgia and Louisiana	)	CC Docket No. 01-277

DECLARATION OF MICHAEL LIEBERMAN
ON BEHALF OF AT&T CORP.

I. BACKGROUND AND SUMMARY

1. My name is Michael R. Lieberman. I am a District Manager in AT&T's Law and Government Affairs organization. In this position I am responsible for providing financial and industry analysis support relating to the costing and pricing of local telecommunications services. I was AT&T's primary participant in the development of the HAI/Hatfield Model of forward looking economic costs of local exchange networks and services and have been responsible for evaluating other costing models and methodologies such as the BCPM and the FCC's Synthesis Model. I have a Bachelor's degree in mathematics and a Master's degree in statistics from the State University of New York at Stony Brook. Prior to joining AT&T as a statistical consultant in 1978, I was a bio-statistical consultant with Carter-Wallace of Cranbury, New Jersey. The purpose of my testimony is to explain why BellSouth's UNE rates in Georgia and Louisiana are not TELRIC-compliant.

2. As I demonstrate below, BellSouth's Georgia and Louisiana switch rates, by BellSouth's own admission, are far above TELRIC levels. That concession is confirmed by a

comparison of BellSouth's Georgia and Louisiana rates to those in Kansas, Texas, Pennsylvania, and New York (as modified to reflect the recommended reductions to those rates) on both a cost-adjusted basis and on a nominal basis.

3. One reason why BellSouth's Georgia and Louisiana rates are so high is that they rely on a significantly overstated daily usage feed (or "DUF") charge. The DUF charge on which BellSouth's Louisiana and Georgia section 271 application is premised are more than double those recently proposed by BellSouth itself in Georgia (in a separate proceeding) and up to 1393% higher than those of other states.

4. BellSouth's Georgia rates are further inflated by the use of outdated data to compute those rates. BellSouth's Georgia cost models use outmoded pre-1997 data to compute rates. As I demonstrate below – and as BellSouth has recently conceded – BellSouth's Georgia switch and loop costs have declined dramatically since 1996. Therefore, even if BellSouth's Georgia rates approximate 1997 forward-looking costs (and BellSouth has not established that they do), those rates far exceed properly computed 2001 forward-looking costs.

5. There is also separate, and very strong, evidence that BellSouth's Louisiana rates are far above TELRIC levels. My analysis of BellSouth's Louisiana rates shows that the conditions necessary to support residential competitive entry in that state do not exist because BellSouth's Louisiana UNE rates are far too high to support mass-market UNE-based retail offerings. This result holds true even when all revenues and benefits that could be incrementally obtained from providing UNE-based local services (*e.g.*, the sale of vertical services) are considered.

II. BELLSOUTH'S GEORGIA UNE SWITCH RATES ARE VASTLY INFLATED ABOVE TELRIC LEVELS.

6. BellSouth's Georgia Section 271 Application is premised on switching rates that total $10.89/line/month.[1] *See* Exhibit 1 (attached). However, in a recent filing before the Georgia Public Service Commission ("GPSC"), BellSouth, citing changes in costs, *proposed* new switching rates – which it purports to be TELRIC-compliant – that are 35% *lower* ($8.09) than the rates relied on in its Section 271 application. *See id.* Thus, by BellSouth's own admission, the switching rates in its Section 271 Application are above TELRIC levels.

7. Even if (contrary to fact) BellSouth had premised its Georgia Section 271 application on its newly *proposed* rates, BellSouth's switching rates would still exceed TELRIC levels. The switch rates in BellSouth's Application are based on 1997 and earlier data. Since then, BellSouth's Georgia switching costs have plummeted, a fact that this Commission has already explicitly recognized.[2] BellSouth's ARMIS data supports that fact. Analysis of BellSouth's Georgia net switch investments and its dial equipment minutes ("DEMs") shows that net switch investments have declined on a per-minute-of-use basis for the past several years and that net switch investment has grown much slower than DEMs. The slow growing net switch

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[1] The total switch related cost per line includes the end office line-side ports and end office usage as well as end office trunk ports, signaling and daily usage feed costs. The cost per line was established by applying an estimate of the average Georgia customer 2001 usage profile to the current UNE switch related rates. *See* Exhibit 1 (attached)

[2] *See, e.g.*, Order on Remand and Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Intercarrier Compensation for ISP-Bound Traffic*, CC Dockets No. 96-98 and 99-68, FCC 01-131, at 84, n. 157, 93 (April 27, 2001) (citing Letter from David J. Hostetter, SBC, to Magalie Roman Salas, Secretary, FCC (Feb. 14, 2001), Attachment (citing September 2000 Morgan Stanley Dean Witter report that discusses utilization of lower cost switch technology); Donny Jackson, "One Giant Leap for Telecom Kind?," *Telephony*, Feb. 12, 2001, at 38 (discussing cost savings associated with replacing circuit switches with packet switches); Letter from Gary L. Phillips, SBC, to Magalie Roman Salas, Secretary, FCC (Feb. 16, 2001) (attaching press release from Focal Communications

investment, combined with the explosive increase in minutes, implies that there has been a 40% decline in switching investment per DEM between 1996 and 2001 (*See* Exhibit 3 (attached)), not the 35% decline in BellSouth's proposals.[3] *See id.*

8. One reason that the switching rates relied on by BellSouth in its Georgia Application are so inflated above TELRIC levels is that those rates include an overstated daily usage feed ("DUF") charge of $2.96. *See* Exhibit 5 (attached). By BellSouth's own admission, that DUF rate is inflated by at least 112% – indeed, the rates proposed by BellSouth in the current state UNE proceeding are premised on a DUF rate of $1.40. *See id.* But even BellSouth's newly proposed DUF charge is too high. Other Section 271-approved states charge DUF rates that are much lower. For example, Verizon's Pennsylvania DUF rate is $0.20 and its New York DUF rate (under the recommended decision) is $0.55. *See* Exhibit 5.[4]

9. Finally, it is clear that even BellSouth's newly proposed switching rates are overstated. Although AT&T has not yet fully analyzed BellSouth's new cost study – it contains at least 11 CDs of material and was submitted about two weeks ago – those rates clearly are predicated on at least one clear TELRIC error. BellSouth has included an excessive "feature port additive" charge ("FPA") of $2.28 in its proposed switching rates. Both the GPSC and the Louisiana Public Service Commission ("LPSC") have in the past rejected BellSouth's attempts

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announcing planned deployment of next-generation switching technology "at a fraction of the cost of traditional equipment").

[3] A similar analysis shows that BellSouth's loop costs have also declined during the past few years. A simple analysis of BellSouth's Georgia net cable and wire ("C&W") investments and its access lines reveals that net C&W investments declined significantly on a per-line basis between 1992 and 2000. In fact, between 1992 and 2000, net C&W investment grew much slower than access lines, resulting in an overall decline in net investment per line of 51% from 1996 to 2001. Because BellSouth's UNE loop rates do not reflect these decreased costs, those rates are not appropriate forward-looking cost-based rates. *See* Exhibit 4 (attached).

[4] The comparisons in Exhibit 5 are based on Georgia usage levels.

to include a separate FPA charge in rates.[5] Removing the feature port additive would reduce BellSouth's *proposed* total switching rates to $5.81 – or 88% below those relied on in BellSouth's Section 271 application. *See* Exhibit 1. A total switching rate of $5.81 is right in line with that in other states, *e.g.,* Illinois, Michigan and Tennessee, where state commissions have very recently examined switching rates. *See* Exhibit 1. The fact that the $10.89 total switching rate relied on in BellSouth's Section 271 application is above TELRIC levels is further confirmed by the fact that it far exceeds the rates in Kansas, Texas, New York and Pennsylvania by 39%, 18%, 57%, and 12% respectively on a cost-adjusted basis.[6] *See id.*[7]

10. Based on this evidence, BellSouth's Georgia switching rates are not remotely TELRIC-compliant and must be rejected.

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[5] *See, e.g.,* Louisiana Public Service Commission, Order Number U-24714 (Subdocket A) at 10 (September 19, 2001) (attached to BellSouth Br., Attachment F, Tab 38).

[6] The Commission has in the past used its Synthesis Model to measure relative cost differences between states. Therefore, I use the Commission's Synthesis Model switch investment per line to measure relative cost differences between states. Switch investment per line is the clear driver of total direct switch cost per line (both capital cost and plant specific expense are a direct function of investment). In addition, using switch investment per line avoids difficulties associated with the allocation of non-switch related expenses. That data also is easily verifiable because it is readily available from the Commission's publicly available Synthesis Cost Model results.

[7] The cost per line was established by applying an estimate of the average Georgia customer 2001 usage profile to the current UNE switch related rates for all companies which have been granted 271 relief, as well as the BellSouth states under review. In the case of New York, the Judge Lindsider recommended decision rates were assessed because they reflect corrections to New York's outdated originally approved rates. My comparison excludes Oklahoma and Massachusetts because the Commission did not specifically find the cost models in those states to be TELRIC-compliant. The Oklahoma rates were not based on any specific cost model but instead on proposed settlement rates. The Commission approved those rates only because they fell within some permissible range above those in Texas. Likewise, the Commission approved the rates in Massachusetts because they were modified to be virtually "identical" to those in New York at the time, and because the Commission concluded that the costs in New York and Massachusetts were sufficiently similar. As noted above, there is now a pending ALJ recommendation before the New York commission that would significantly lower the rates in New York.

III. BELLSOUTH'S LOUISIANA UNE SWITCH RATES ARE VASTLY INFLATED ABOVE TELRIC LEVELS.

11. BellSouth's Louisiana switch rates also are substantially inflated above TELRIC levels. Like its Georgia rates, BellSouth's Louisiana switching rates rely on overstated DUF rates ($2.43, *see* Exhibit 11 (attached)) that exceed the DUF rates in other states by as much as 1393%. *See* Exhibit 5. The fact that BellSouth's Louisiana rates are overstated is confirmed by a comparison of those rates to those recently proposed by BellSouth in the ongoing Georgia state UNE pricing proceeding. Louisiana total switching rates are 27% higher than those it recently proposed in Georgia on a cost adjusted basis. *See* Exhibit 1. And that difference increases to 88% if the FPA charge is excluded from BellSouth's recent rate proposals. Moreover, BellSouth's Louisiana rates exceed those in Kansas, Texas, New York, and Pennsylvania, on a cost adjusted basis, by 31%, 11%, 38% and 6% respectfully. *See id.*

12. The massively inflated UNE rates proposed by BellSouth in Louisiana foreclose profitable entry in that state. The viability of a UNE-based offering – that is, whether it makes sense for AT&T (or any other entrant) to commit its shareholders' capital to that enterprise – turns on the same type of analysis as any other investment decision. Capital is scarce and must be devoted to its highest-valued uses. Thus, a carrier considering whether to enter the local services business in a state (or to continue to participate in that business) must determine whether revenues attributable to the service will exceed the costs of providing the service by an amount sufficient to generate a return that is commensurate with the expectations of investors concerning risks and returns and with competing uses for the capital.

13. There are essentially three steps to this analysis: (1) identifying and estimating each of the costs of providing the service, (2) identifying and estimating each of the revenue opportunities that will be generated by providing the service, and (3) deriving from these

estimated "cash flows" some standard financial measure that allows the investment opportunity to be assessed (and compared to alternative investment opportunities).

14. Because telecommunications carriers are subject to numerous reporting requirements, obtaining the inputs necessary to conduct my analysis was straightforward. Carrier-specific data, including retail local service prices, UNE prices, and access prices are largely publicly reported and directly verifiable. I am confident, therefore, that the following analysis paints an accurate picture of the barrier that BellSouth's UNE prices in Louisiana pose to residential competition in that state.

15. The remainder of this section is organized as follows. First, I describe the costs associated with a residential UNE-Platform offering in Louisiana. Second, I describe the revenues that are available to carriers serving customers in Louisiana. Third, I translate these cash flows into margins by looking at the difference in a Louisiana entrant carrier's revenues and costs – a type of financial measure commonly used by businesses to make investment decisions. This margin analysis shows that profitable UNE-Platform-based offerings cannot be undertaken by competitive carriers in Louisiana at the rates contained in BellSouth's application. Exhibit 6 to my declaration, entitled "UNE Connectivity Margin for BellSouth Louisiana," summarizes the results of my cost, revenue and margin analysis (reflecting average year 2001 values). I refer to, and generally follow, the order of this Exhibit 6 in the discussion below. I also refer to supporting Exhibits 7-14, which provide additional detail on the assumptions and calculations underlying Exhibit 6.

16. **Costs.** There are two basic categories of costs associated with UNE-Platform-based services: (1) "connectivity" costs (*i.e.*, the costs associated with purchasing the necessary network elements from the incumbent), and (2) a carrier's own internal costs of running a local

telephone service business (*e.g.*, developing, maintaining and operating computer support systems, as well as marketing, customer care, and administration). My analysis focuses primarily on the former category of costs, which are readily identifiable and verifiable.

17. The rates for UNE loops are $11.77/month in Zone 1, $22.39 in Zone 2, and $48.26 in Zone 3. For UNE switch ports, new entrants pay $1.36/month in all zones. These and the other relevant BellSouth Louisiana rates are listed in Exhibit 7.

18. Most other network elements required for local service are charged on a usage basis. Therefore, it is necessary to combine published per minute rates with usage volumes to estimate the cost of the other network elements. BellSouth usage volumes are available from BellSouth's annual "dial equipment minutes" ("DEM") submissions to NECA and ARMIS (the same data that is used in the Commission's Synthesis Cost Model). BellSouth's 2000 reported DEM can be converted to 2001 DEM per line by adjusting upward the 2000 per line statistics by the annual growth rate between 1998 and 2000. For the toll-related categories (which includes access and intraLATA toll MOU), where a CLEC pays for both the originating and terminating minutes, the total DEM per line can be split between originating and terminating minutes. Therefore, I have divided the total DEM per line numbers by two. This calculation of "usage minutes" retains the non-conversation time that is reflected in DEM and which is included in the cost of UNEs. I have assumed that there will be netting of charges for traffic terminating to a new entrant's UNE-P customer and thus originating local traffic and its associated termination is relevant for local usage on these lines. These calculations for local, intraLATA toll, intrastate interLATA, and interstate usage are detailed in Exhibit 8 to this declaration.

19. For each category of usage (*e.g.*, local, intraLATA toll, etc.), particular network architecture assumptions must be applied. Local usage must be apportioned to reflect the fact

that some local calls are "intraswitch" calls (where the calling and called parties are served by the same switch), some are "interswitch" calls. Interswitch calls require assumptions regarding the portion of these calls that are routed directly between the two switches and those that are routed via a tandem. According to the Commission's Synthesis Model, approximately 2 percent of local interswitch minutes and 20 percent of intraLATA toll and interLATA minutes are tandem-routed. Approximately 35 percent of local calls in BellSouth's network are assumed to be intraswitch calls.[8] *See* Exhibit 9. The calculated intraswitch, interswitch, and tandem conversation minutes (or, in the case of toll calls, the toll direct and toll tandem conversation minutes) are then multiplied by the corresponding BellSouth Louisiana usage charges to arrive at expected monthly usage costs per line, as detailed in Exhibit 10 to my declaration.[9] The total monthly usage charge per line, which is listed in Exhibit 6, is $6.11.[10]

20. I have included the development of the DUF ("Daily Usage Feed") charge on Exhibit 11 which amounts to $2.43/month. This figure is a function of the number of ADUF and ODUF records multiplied by a set of per record rates.

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[8] Although the Commission's Synthesis Model recognizes that about 50 percent of local calls would be intraswitch calls in an efficiently designed network with properly sized switches, the relevant figure for a new entrant contemplating entry is what it will actually pay BellSouth. Because BellSouth's existing network is not efficiently designed and sometimes uses two switches where one would be more efficient, the 35 percent figure must be used to determine expected connectivity costs that will be billed by BellSouth to the competing carrier.

[9] The signaling charge calculations, a very small portion of total usage charges, are also contained in Exhibit 9. As signaling is assessed per message, an estimate of messages per minute is developed and is applied to the message rate.

[10] UNE purchasers must pay switching, transport and related usage charges for access-related usage whether a call is originated or terminated by their customer, and the assumption is that the customer receives as much access traffic as he or she originates. For intraLATA toll traffic, every originating minute is associated with a terminating minute to another customer (for simplicity assumed to be served by the same ILEC) in the ILEC's service area.

21. In total, the average recurring monthly connectivity costs (loop plus usage plus DUF) incurred by BellSouth to serve a Louisiana customer is $26.87. This is an average of the monthly connectivity costs for Zone 1 ($21.66), Zone 2 ($32.28), and Zone 3 ($58.15) weighted by the relative number of estimated residence lines in each zone served by BellSouth. *See* Exhibit 6. When the BellSouth Louisiana non-recurring charges of $2.31 for new customers (assumed to be 10% of CLEC orders)[11] and $0.10 for migration (assumed to be 90% of CLEC orders) are added and amortized over three years, the average total monthly platform cost in Louisiana is $0.01.

22. **Revenues.** The BellSouth local service rates that UNE-Platform-based providers can obtain for their services are effectively capped by the retail rates charged by BellSouth. If new entrants attempt to charge higher rates than BellSouth, these new entrants would be unable to attract customers. BellSouth local service rates are readily available and verifiable from many sources, including CCMI. Mapping the local rates to wire centers and mapping the wire centers to UNE zones results in CCMI rates that range from $11.36/month in Zone 3 to $12.58/month in Zone 1.[12]

23. There are, of course, other revenue opportunities available to new entrants. A local service provider can expect to sell vertical features to many customers. The rates that new entrants are likely to obtain for these services can be determined from BellSouth's tariffed rates for these services. Those rates, adjusted for penetration levels, are depicted in Exhibit 6. Based upon 1Q01 ReQuest market research data provided by TNS (formerly PNR), BellSouth's Louisiana penetration rates for Caller ID, Call Waiting, and Call Forwarding are 60 percent, 62

[11] Because our experience is that a much larger percent of orders incur the more expensive new order charge, the 10% assumption is extremely conservative.

percent and 25 percent, respectively. Thus, a new entrant can expect, on average, to receive about $9.89/month in vertical feature revenue.[13] The federal Subscriber Line Charge brings in an additional $4.68/month/line. Total expected customer revenues, therefore, average about $26.50/month (ranging from low of $25.93 per month in Zone 2 to a high of $27.14 per month in Zone 1).

24. A UNE-Platform-based provider also earns access revenues for originating and terminating long-distance calls. This revenue may either be explicit (when a CLEC charges an independent IXC, or implicit if the CLEC acts as its own IXC). To estimate these access revenues it is necessary to multiply expected toll minutes (derived from the BellSouth's DEM data) by the relevant access charges (obtained from analysis of AT&T's intrastate and interstate billings) that AT&T can replace with UNEs.[14] My calculations show that a UNE-Platform entrant's estimated monthly per line access charge revenues are $1.94/month. *See* Exhibit 12, attached.

25. Adding all of these revenues, AT&T (or another entrant) could expect to receive $28.80/line/month from residential UNE-based service in BellSouth (or between $27.87 and $29.08/line/month, depending upon the density zone).

26. **Margin.** There are many standard financial measures for assessing the profitability of investing (or continuing) in a line of business. The margin per line can be computed by comparing a carrier's expected costs with its expected revenues for each line. A

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[12] These values reflect retail rates as reported by CCMI Rate Information, BellSouth Local Exchange Rates (effective October 3, 2000) and are listed in Exhibit 13.

[13] This vertical feature revenue estimation is based upon an a la carte approach. Because a portion of the reported feature penetration would have been part of BellSouth's offering of discounted bundles, this revenue is overstated relative to these features.

[14] Dedicated transport access charges are not included because AT&T does not avoid these access charges through its acquisition of a UNE-P local customer.

"gross" UNE-P margin can be determined by subtracting expected direct connectivity costs from expected revenues. A "net" UNE-P margin can only be determined by subtracting all expected costs (*e.g.*, marketing, customer service, billing, order processing, and other operating activities) from expected revenues, which usually amount to $10 per line.[15]

27. This margin analysis for Louisiana shows that residential gross margins in Louisiana are *negative* in two of the three UNE zones in Louisiana (negative $3.99 in zone 2 and negative $30.29 in zone 3).[16] *See id.* Thus, residential UNE-based entry is not possible in Louisiana. Even though there is a positive margin in zone 1 ($7.41), that amount is not sufficient to cover any potential entrant's internal costs of operating a local telephone business, which is typically at least $10. In any case, statewide gross margins for Louisiana are a paltry $1.92 – thus statewide residential UNE-based entry would not be profitable in Louisiana. *See id.*

IV. CONCLUSION

28. For the foregoing reasons, it is clear that BellSouth's Georgia and Louisiana rates are significantly above those that a reasonable application of TELRIC principles would have produced.

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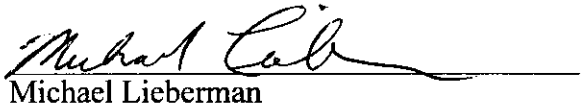
[15] WorldCom has estimated that those "[i]nternal cost . . . exceed $10 per line per month." WorldCom Corrected Reply Comments, *Re: CC Docket No. 01-138 Application by Verizon for Authorization to Provide In-Region, InterLATA Services in Pennsylvania*, Declaration of Vijetha Huffman at page 3 (August 7, 2001).

[16] These results vary slightly from those shown in AT&T's September 15th Ex Parte meeting with the Commission Staff because I replaced the ReQuest 4Q00 market research data provided by TNS – which I used to compute penetration rates – with more recent ReQuest 1Q01 market research data.

VERIFICATION PAGE

I declare under penalty of perjury that the foregoing Declaration is true and correct.



Michael Lieberman

Executed on: October 19, 2001

EXHIBIT 1

Exhibit 1

Cost Adjusted Total Switch Rates

Calculated at Georgia Volumes

Company	State	Total Switching-Related Cost, per line per month	GA BS Rates Relative to other 271 states	LA BS Rates Relative to other 271 states	Switch Investment per line	GA BS inv Relative to other 271 states	LA BS inv Relative to other 271 states	Cost Adjusted Relative Switch Rates_GA	Cost Adjusted Relative Switch Rates_LA
BS	GA	$ 10.89	0%	5%	$ 137.79	0%	11%	0%	-6%
BS	GA-Generic	$ 8.09	35%	41%	$ 137.79	0%	11%	35%	27%
BS	GA-Generic (less feature additive)	$ 5.81	88%	96%	$ 137.79	0%	11%	88%	77%
BS	LA	$ 11.39	-4%	0%	$ 152.73	-10%	0%	6%	0%
Other 271 States									
SBC	KS	$ 8.85	23%	29%	$ 156.03	-12%	-2%	39%	31%
SBC	OK 12/28/00	$ 11.89	-8%	-4%	$ 152.52	-10%	0%	1%	-4%
SBC	TX	$ 9.43	16%	21%	$ 140.71	-2%	9%	18%	11%
VZ	MA	$ 20.52	-47%	-45%	$ 141.70	-3%	8%	-45%	-49%
VZ	NY-Current	$ 21.32	-49%	-47%	$ 140.29	-2%	9%	-48%	-51%
VZ	NY-RD	$ 7.06	54%	61%	$ 140.29	-2%	9%	57%	48%
VZ	PA	$ 9.88	10%	15%	$ 139.97	-2%	9%	12%	6%
Select Non 271 States									
SBC	IL Ameritech - Staff Proposal	$ 2.99	264%	281%	$ 137.75	0%	11%	264%	243%
SBC	IL Ameritech - SBC Alternative I Proposal	$ 6.06	80%	88%	$ 137.75	0%	11%	80%	70%
SBC	IL Ameritech - SBC Alternative II Proposal	$ 4.47	143%	154%	$ 137.75	0%	11%	143%	130%
SBC	IL Ameritech - Current	$ 5.49	98%	107%	$ 137.75	0%	11%	98%	87%
VZ	MI Ameritech - Current	$ 4.78	128%	138%	$ 142.30	-3%	7%	135%	122%
VZ	TN Bell South - Current	$ 6.21	75%	83%	$ 148.64	-7%	3%	89%	78%

EXHIBIT 2

Exhibit 2

Switching Cost Comparison

Calculated at Georgia Volumes

	Element	GA	GA - Generic	LA	TX	OK 12/28/00	KS	MA	NY-Current	PA	NY-RD
	Local Switching Rate, per MOU										
1	Originating	$0.001633	$0.000791	$0.001868	$0.001507	$0.002225	$0.001570	$0.004009	$0.003429	$0.001802	$0.001079
2	Terminating	0.001633	0.000791	0.001868	$0.001507	0.002225	0.001570	0.004009	0.003429	0.001615	0.000723
3	**Signaling** per Message	Included in Switching rate	Included in Switching rate	Included in Switching rate	0.000060	0.000267	0.000034	0.000185	0.000297	Included in Switching rate	Included in Switching rate
4	**Common Trunk Port** per MOU	$0.000156	$0.000158	$0.000180	Included in Switching rate	Included in Switching rate	Included in Switching rate	$0.000697	$0.000792	Included in Switching rate	$0.000329
	Originating	$3.35	$1.62	$3.83	$3.09	$4.57	$3.22	$8.23	$7.04	$3.70	$2.21
	Terminating	$2.34	$1.13	$2.68	$2.16	$3.19	$2.25	$8.23	$7.04	$3.31	$1.48
	Common Trunk Port+Signaling	$0.45	$0.45	$0.52	$0.02	$0.10	$0.01	$2.06	$2.38		$0.94
5	**Total Switching Usage Cost**, per line per month	$6.14	$3.21	$7.03	$5.28	$7.85	$5.48	$18.52	$16.45	$7.01	$4.64
6	**Line Side Port rate**, per line per month	$1.79	$3.48	$1.36	$2.40	$2.28	$1.61	$2.00	$2.50	$2.67	$1.86
7	**DUF** , per line per month	$2.96	$1.40	$3.00	$1.75	$1.75	$1.75		$2.37	$0.20	$0.55
	Total Switching-Related Cost, per line per month	$10.89	$8.09 $5.81	$11.39	$9.43	$11.89	$8.85	$20.52	$21.32	$9.88	$7.06

Volume Profile		Intra-Switch	Inter-Switch
		30%	70%
Originating	2052	619	1434
Terminating	2052	0	1434
Average length of Message	4		

Notes/Sources:

1 Statewide average originating Local switching minutes of use rate exclusive of EO trunk port rate when explicit.
2 Statewide average terminating Local switching minutes of use rate exclusive of EO trunk port rate when explicit. If bill and keep in effect, effective rate is utilized.
3 Signaling rate per message -- not always a separate UNE-P rate element.
4 End Office Common Trunk Port rate per MOU -- not always a separate rate element
5 Per table above, uses estimated 2001 ARMIS-based Georgia DEM
6 Line port rate appropriate for UNE-P.
7 Where applicable, cost per line are a function of message volumes, ADUF, and ODUF rates.

EXHIBIT 3

Exhibit 3

Time Trend Analysis of Net Switch Investment per DEM

BS - GA	1992	1993	1994	1995	1996	1997	1998	1999	2000	2000 vs 1992 Overall Growth	2000 vs 1992 CAGR	2000 vs 1996 Overall Growth	Estimate growth 1996 to 2001
Total DEM (Millions)	69,981	17,101	78,898	85,817	97,424	114,596	133,416	157,849	176,508	152%	12.3%	81%	93%
Total CO Switch EOP Gross Plant ($M)	1,197,726	1,241,072	1,306,409	1,313,873	1,446,345	1,521,779	1,599,624	1,675,796	1,798,395				
Est Total CO Switch EOP Net Plant ($M)	786,955	791,007	813,210	782,493	823,392	854,038	886,130	930,395	1,009,629	28%	3.2%	23%	26%
Net Switch Inv per DEM	$ 0.01125	$ 0.04626	$ 0.01031	$ 0.00912	$ 0.00845	$ 0.00745	$ 0.00664	$ 0.00589	$ 0.00572	-49%	-8.1%	-32%	**-40%**

BS - LA	1992	1993	1994	1995	1996	1997	1998	1999	2000	2000 vs 1992 Overall Growth	2000 vs 1992 CAGR	2000 vs 1996 Overall Growth	Estimate growth 1996 to 2001
Total DEM (Millions)	45,164	10,694	47,837	50,975	54,013	59,510	69,097	78,174	86,097	91%	8.4%	59%	68%
Total CO Switch EOP Gross Plant ($M)	748,836	774,790	787,304	791,133	824,913	865,753	903,062	929,840	959,217				
Est Total CO Switch EOP Net Plant ($M)	492,016	493,819	490,079	471,169	469,616	485,869	500,262	516,243	538,510	9%	1.1%	15%	16%
Net Switch Inv per DEM	$ 0.00703	$ 0.02888	$ 0.00621	$ 0.00549	$ 0.00482	$ 0.00424	$ 0.00375	$ 0.00327	$ 0.00305	-57%	-9.9%	-37%	**-47%**

BS - Total	1992	1993	1994	1995	1996	1997	1998	1999	2000	2000 vs 1992 Overall Growth	2000 vs 1992 CAGR	2000 vs 1996 Overall Growth	Estimate growth 1996 to 2001
Total DEM (Millions)	353,596	98,596	450,625	481,689	524,847	603,930	707,787	822,787	914,302	159%	12.6%	74%	87%
Total CO Switch EOP Gross Plant ($M)	6,997,491	7,250,458	7,425,551	7,512,966	7,974,758	8,364,798	8,803,392	9,145,928	9,702,334				
CO Switch Depreciation Reserve	2,399,855	2,629,319	2,803,313	3,038,526	3,434,796	3,670,390	3,926,651	4,068,147	4,255,392				
CO Switch Reserve Ratio	34%	36%	38%	40%	43%	44%	45%	44%	44%				
Total CO Switch EOP Net Plant ($M))	4,597,636	4,621,139	4,622,238	4,474,440	4,539,962	4,694,408	4,876,741	5,077,781	5,446,942	18%	2.1%	20%	22%
Net Switch Inv per DEM	$ 0.0130	$ 0.0469	$ 0.0103	$ 0.0093	$ 0.0087	$ 0.0078	$ 0.0069	$ 0.0062	$ 0.0060	-54%	-9.3%	-31%	**-40%**

Source: GA and LA data from ARMIS 43-03 and 43-08, BS data is from ARMIS 43-02 and 43-08

EXHIBIT 4

Exhibit 4

Time Trend Analysis of Cable and Wire Net Investment per Line

BS - GA	1992	1993	1994	1995	1996	1997	1998	1999	2000	2000 vs 1992 Overall Growth	2000 vs 1992 CAGR	2000 vs 1996 Overall Growth	Estimate growth 1996 to 2001
Total Access Lines	3,213,802	3,389,810	3,622,315	3,917,484	4,343,728	4,611,974	5,375,278	6,301,724	7,566,846	135%			
Cable & Wire Facilities (eoy)	2,940,760	3,095,390	3,238,754	3,411,702	3,579,643	3,723,327	3,899,962	4,092,214	4,408,873				
Estimated Net C&W Plant	1,689,888	1,717,484	1,726,813	1,740,478	1,739,592	1,712,713	1,693,947	1,679,652	1,740,292	3%			
Net C&W Plant per tot line	$ 525.82	$ 506.66	$ 476.72	$ 444.28	$ 400.48	$ 371.36	$ 315.14	$ 266.54	$ 229.99	-56%	-8.8%	-43%	**-51%**

BS - LA	1992	1993	1994	1995	1996	1997	1998	1999	2000				
Total Access Lines	1,945,617	2,021,210	2,115,896	2,196,258	2,305,079	2,415,721	2,602,249	2,785,700	3,216,913	65%			
Cable & Wire Facilities (eoy)	2,019,748	2,077,516	2,125,614	2,182,765	2,231,881	2,286,178	2,340,710	2,393,497	2,459,223				
Estimated Net C&W Plant	1,160,635	1,152,714	1,133,318	1,113,537	1,084,623	1,051,631	1,016,686	982,412	970,717	-16%			
Net C&W Plant per tot line	$ 596.54	$ 570.31	$ 535.62	$ 507.02	$ 470.54	$ 435.33	$ 390.70	$ 352.66	$ 301.75	-49%	-7.3%	-36%	**-43%**

BS - Total	1992	1993	1994	1995	1996	1997	1998	1999	2000				
Total Access Lines	19,209,116	20,127,546	21,251,808	22,595,392	24,493,048	25,779,614	28,452,496	31,443,504	37,168,380	93%			
Cable & Wire Facilities (eoy)	17,784,490	18,560,260	19,255,148	20,057,012	20,836,040	21,620,126	22,478,464	23,311,660	24,470,990				
Acumulated Depreciation	7,564,751	8,262,061	8,988,839	9,824,936	10,710,392	11,674,969	12,714,952	13,743,375	14,811,681				
Net C&WF Plant	10,219,739	10,298,199	10,266,309	10,232,076	10,125,648	9,945,157	9,763,512	9,568,285	9,659,309	-5%			
C&W Depreciation Reserve	43%	45%	47%	49%	51%	54%	57%	59%	61%				
Net C&W Plant per Total Line	$ 532.03	$ 511.65	$ 483.08	$ 452.84	$ 413.41	$ 385.78	$ 343.15	$ 304.30	$ 259.88	-51%	-7.7%	-37%	**-45%**

Source: GA and LA data from ARMIS 43-03 and 43-08, BS data is from ARMIS 43-02 and 43-08

EXHIBIT 5

Exhibit 5

Comparison of DUF Cost

Calculated at Georgia Volumes

Company	State	DUF Cost, per line per month	GA Relative to other 271 states	LA Relative to other 271 states
BS	GA	$ 2.96	0%	1%
BS	LA *	$ 3.00	-1%	0%
BS	GA Generic	$ 1.40	112%	114%
SBC	KS	$ 1.75	69%	71%
SBC	OK 12/28/00	$ 1.75	69%	71%
SBC	TX	$ 1.75	69%	71%
VZ	MA	$ -	-	-
VZ	NY-Current	$ 2.37	25%	26%
VZ	NY-RD	$ 0.55	435%	443%
VZ	PA	$ 0.20	1373%	1393%

* The DUF charge at LA volumes is $2.43 (see Exhibit)

EXHIBIT 6

Exhibit 6

Connectivity Margin for Bell South Louisiana

COSTS	Statewide Average	Zone 1	Zone 2	Zone 3
Zone weights		67%	26%	7%
Loop	$16.98	$11.77	$22.39	$48.26
Port	$1.36	$1.36	$1.36	$1.36
Usage	$6.11	$6.11	$6.11	$6.11
DUF	$2.43	$2.43	$2.43	$2.43
Platform - Recurring Cost	$26.87	$21.66	$32.28	$58.15
Amortization of NRC Fee	$0.01	$0.01	$0.01	$0.01
Total Platform (w/NRC)	$26.88	$21.67	$32.29	$58.16

REVENUES	RES @ SWBT
Basic Local Svc	
Zone 1	$12.57
Zone 2	$11.79
Zone 3	$11.36
Basic Local Svc -Statewide	$12.29
Features	
Caller ID (Name & Number)	$4.52
Call Waiting	$2.89
Call Forwarding	$2.48
Sub. Line Chg.	$4.68
Access	$1.94
Total Revenue	
Zone 1	$29.08
Zone 2	$28.30
Zone 3	$27.87
Total Revenue -Statewide	$28.80

Feature Penetration Rate Assumption
60%
62%
25%

MARGINS _RES @ SWBT	$/Line	%
Zone 1	**$7.41**	**25%**
Zone 2	**($3.99)**	**-14%**
Zone 3	**($30.29)**	**-109%**
Residence Statewide	**$1.92**	**7%**

EXHIBIT 7

Exhibit 7

Bell South Louisiana UNE Rates

UNE Element	Zone 1	Zone 2	Zone 3	Average
Loop	$11.77	$22.39	$48.26	$16.98
Port	$1.36	$1.36	$1.36	$1.36
End Office Switching, Per MOU	n/a	n/a	n/a	$0.0018680
End Office Trunk Port - Shared, Per MOU	n/a	n/a	n/a	$0.0001800
Common Transport - Fac. Term, Per MOU	n/a	n/a	n/a	$0.0003748
Common Transport - Per Mile, Per MOU	n/a	n/a	n/a	$0.0000032
Tandem Switching, Per MOU	n/a	n/a	n/a	$0.0001067

EXHIBIT 8

Exhibit 8

ARMIS-Based DEM Per line Per Month

2000 Per Line Per Month DEM						2001 Per Line Per Month DEM				
Local	Local	IntraLATA Toll	Intrastate InterLATA Access	Interstate InterLATA Access	Total DEM per line CAGR: 2000 vs 1998	Local	IntraLATA Toll	Intrastate InterLATA Access	Interstate InterLATA Access	Total DEM
	2,336	106	36	291	11.4%	2,917	55	106	281	3,347
1-Way DEM per Line	1,168	53	18	146		1,458	27	53	140	1,673

EXHIBIT 9

Exhibit 9

Bell South_Louisiana — **UNE Unit Cost Development**

		Local			Intralata toll		Intrastate InterLATA		Interstate InterLATA	
			interswitch local		Up to IXC POP					
	Rates	Intraswitch local	Direct	Tandem	Intralata Toll Direct	Intralata Toll Tandem	Interlata Toll Direct	Interlata Toll Tandem	Interlata Toll Direct	Interlata Toll Tandem
EO Switching	$ 0.0018680	1	1	1	0.5	0.5	1	1	1	1
EO Switch Port	$ 0.0001800		1	1		0.5		1		1
Common Xport - Blended	$ 0.0004068		1	1		0.5		1		1
Tandem switching (usage+port)	$ 0.0003287			1		0.5		1		1
Term. EO Switching	$ 0.0018680		1	1						
Term. EO Switch Port	$ 0.0001800		1	1						
Terminating - Recip Comp	$ 0.0010000				0.5	0.5				
		$ 0.0018680	$ 0.0045028	$ 0.0048315	$ 0.0014340	$ 0.0018918	$ 0.0018680	$ 0.0027835	$ 0.0018680	$ 0.0027835
MOU		510	929	19	44	11	85	21	225	56
Cost per Line		$ 0.953	$ 4.183	$ 0.092	$ 0.063	$ 0.021	$ 0.159	$ 0.059	$ 0.420	$ 0.156

MOU Assumptions	Outbound	Inbound	total	intraoffice	tandem
Local	1,458	-	1,458	35%	2%
IntraLATA Toll	27	27	55	0%	20%
Intrastate InterLATA	53	53	106	0%	20%
Interstate InterLATA	140	140	281	0%	20%
Total	1,679	221	1,900		

Signaling Factor Development

	Conversation MOU/MSG	Completion rate	Calls per MOU
Local	4	1	0.2500
IntraLATA Toll	4	1	0.2500
Intrastate InterLATA	4	1	0.2500
Interstate InterLATA	5	1	0.2000

EXHIBIT 10

Exhibit 10

UNE Usage Cost Per Line by Service

Bell South_Louisiana					
	% MOU		UNE Cost	Cost per Line	
Local					
Intraswitch local	35%	$	0.001868		
Interswitch direct local	64%	$	0.004503		
Interswitch tandem local	1%	$	0.004832		
		$	**0.003585**	$	5.23
IntraLATA Toll					
Up to IXC POP					
intralata toll direct	80%	$	0.001434		
intralata toll tandem	20%	$	0.001892		
		$	**0.001526**	$	0.08
Intrastate InterLATA					
interlata toll direct	80%	$	0.001868		
interlata toll tandem	20%	$	0.002784		
		$	**0.002051**	$	0.22
Interstate InterLATA					
interlata toll direct	80%	$	0.001868		
interlata toll tandem	20%	$	0.002784		
		$	**0.002051**	$	0.58
Total Usage Per Line				**$**	**6.11**

EXHIBIT 11

Exhibit 11

Bell South_Louisiana

Daily Usage Feed (DUF)	LA U-24714_A Rev.2		
ADUF - Message Processing, per message	$0.007983		
ADUF - Data Transmission(Connect:Direct), per message	$0.000127	77	$0.63
	$0.008111	387	
ODUF - Recording, per Message	$0.000012		
ODUF - Message Processing, per message	$0.004641		
ODUF - Data Transmission(Connect:Direct). Per message	$0.000106	378	$1.80
	$0.005	1513	
DUF Total			$2.43

EXHIBIT 12
(REDACTED FOR PUBLIC INSPECTION)

EXHIBIT 13

Exhibit 13

Basic Local Rates

Local Rate Zones	CCMI Rate 1FR	Local Revenue by Local Rate Zone	# of Wire Centers	# of Lines	# of Exchanges
1	$ 10.97	$ 1,809,908	84	164,987	79
2	$ 11.18	$ 439,442	12	39,306	11
3	$ 11.39	$ 547,340	8	48,054	8
4	$ 11.60	$ 542,133	13	46,736	12
5	$ 11.81	$ 554,189	12	46,925	7
6	$ 12.02	$ 430,502	5	35,816	5
7	$ 12.23	$ 767,705	7	62,772	7
8	$ 12.43	$ 863,296	8	69,453	8
9	$ 12.64	$ 12,948,696	79	1,024,422	38
Totals/Avg.	**$ 12.29**	$ 18,903,210	228	1,538,471	175

Local Rate Effective Date 10/3/2000

EXHIBIT 14

Exhibit 14

Basic Local and UNE Loop Rates by UNE Zone

UNE Rate Zone	Res Lines	UNE Loop Price	Average Local Rate	# of Wire Centers	% of Total Lines
1	1,035,670	$ 11.77	$ 12.57	57	67%
2	399,623	$ 22.39	$ 11.79	94	26%
3	103,177	$ 48.26	$ 11.36	77	7%
Totals/Avg.	**1,538,471**	**$ 16.98**	**$ 12.29**	**228**	**100%**